

SAF-RC-001
Industrial Hygiene Sampling
FINAL DATA

NO DISTRIBUTION REQUIRED

COMMENTS:

SDG

06I-0214-01

SAF-RC-001

Rad only ☒ Chem only Rad & Chem

☒ Complete

Partial

300 Area 303M Bldg

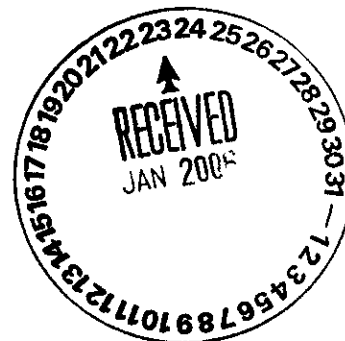
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Cover Page

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Report Identification Number: 06I-0214-01
Subcontract Number: 0000X-BO-G0058-B-Mod#4
Name of Industrial Hygienist: Denise A. Pitts / Henry W. Ruby
Laboratory Identification Number: DCHM
SAF#: RC-001 / R303M0 J451
Payroll#: 73513



Sample Information

Sample Date	Customer Sample Number	Laboratory Sample Number	Method	Analytical Batch Identification	Sample Matrix
18 Jan 2006	J10X04	06I01768	NMAM 7300M	G060M00P	G WIPE
18 Jan 2006	J10RH6	06I01769	NMAM 7300M	G060M00P	G WIPE
18 Jan 2006	J10X06	06I01770	NMAM 7300M	G060M00P	G WIPE
18 Jan 2006	J10X07	06I01771	NMAM 7300M	G060M00P	G WIPE

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Name: Lisa M. Reid
Title: Chemist
Date: January 23, 2006

Report Identification Number: 06I-0214-01
Subcontract Number: 0000X-BO-G0058-B-Mod#4
Name of Industrial Hygienist: Denise A. Pitts / Henry W. Ruby
Laboratory Identification Number: DCHM
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General Set Information: There are 5 samples in set 06I-0213-02, 4 samples in set 06I-0214-01 and 5 samples in set 06I-0215-01. The samples were analyzed for cadmium, lead and beryllium on Ghost Wipe. No problems were encountered with the receipt of these samples and no contact with the CTR was required.

Method Summary: Samples were transferred to 50 ml centrifuge tubes and digested in the presence of 5 mL of nitric acid and 5 mL of ASTM Type II water. Samples were digested in a hot block set at 110°C for 60 minutes. Samples were then diluted to a 25 mL volume with ASTM Type II Water. Samples were shaken and delivered for ICP analysis.

Sample Preparation: All samples were prepared in accordance with DCL SOP "IH-AN-021" and NIOSH method NMAM 7300 modified for hot block digestion.

Holding Times: The holding times were met for both sample preparation and analysis.

Instrument Calibration: Instrument calibration was performed in accordance with NIOSH method NMAM 7300.

Initial and Continuing Calibration Verification Analysis: Beryllium, cadmium and lead recoveries in all Initial Calibration Verification (ICV) and Continuing Calibration Verification (CCV) samples are within the quality control limits of +/- 10%.

Initial and Continuing Calibration Blank Analysis: No beryllium results were found in the Initial Calibration Blank (ICB) or Continuing Calibration Blanks (CCB) at levels above the Contract Required Detection Limits (CRDL) of 0.01 ug/sample. No cadmium results were found in the Initial Calibration Blank (ICB) or Continuing Calibration Blanks (CCB) at levels above the Contract Required Detection Limits (CRDL) of 0.1 ug/sample. No lead results were found in the Initial Calibration Blank (ICB) or Continuing Calibration Blanks (CCB) at levels above the Contract Required Detection Limits (CRDL) of 3. ug/sample.

Method Blank Analysis: No beryllium, cadmium or lead was found in any of the media blank samples above the Contract Required Detection Limit (CRDL).

Dilution(s): None.

Laboratory Control Sample and Duplicate Analysis: One Laboratory Control Sample (LCS) and one Laboratory Control Sample Duplicate (LCSD) were prepared and analyzed with the sample batch. The LCS results were within the control limits of +/- 20%. The Relative Percent Difference (RPD) between the LCS and the LCSD were within the control limit of 20%.

Replicate Analysis: Two samples in this batch were replicated. The RPD between the samples and the replicates was within the control limit of 20%. If the result of the sample or replicate is below the CRDL, replicate analysis is negligible.

Flagging Codes: None

Nonconformance/Corrective Action Report (NC/CAR): N/A

Sample Calculation: The final results are calculated by the following equation:
Final result for aqueous samples ($\mu\text{g}/\text{sample}$) = (A) x (B) x (C)

Where:

A = Analyte concentration from instrument determination ($\mu\text{g}/\text{L}$)

B = Concentration factor from sample preparation
= Final Volume of Digestate (L)

Sample

C = Dilution performed at time of analysis

Example Calculation: $(1 \mu\text{g}/\text{L}) \times (0.025 \text{ L}/\text{sample}) \times (1) = 0.025 \mu\text{g}/\text{sample}$

Miscellaneous Comments: None

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 Payroll#: 73513

Customer Sample Number	Laboratory Sample Number	Date Analyzed	Beryllium µg/sample		Cadmium µg/sample		Lead µg/sample	
J10X04	06I01768	20 Jan 2006	<0.01	U	<0.1	U	<3.	U
J10RH6	06I01769	20 Jan 2006	<0.01	U	<0.1	U	<3.	U
J10X06	06I01770	20 Jan 2006	<0.01	U	<0.1	U	<3.	U
J10X07	06I01771	20 Jan 2006	<0.01	U	<0.1	U	<3.	U
Limit of Detection (LOD)			0.01		0.1		3.	
Required Detection Limit (RDL)								

U - Parameter not detected above LOD.

J - Parameter between LOD and RDL.



QC Summary Page

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Report Identification Number: 06I-0214-01
Subcontract Number: 0000X-BO-G0058-B-Mod#4
Name of Industrial Hygienist: Denise A. Pitts / Henry W. Ruby
Laboratory Identification Number: DCHM
SAF: RC-001 / R303M0 J451
Payroll#: 73513

Batch ID: G060M00P

QC Sample ID	QC Type	Analyte	Units	Result	Parent Result	Target	Percent Rec.	Relative Percent Diff.
BL-240257-1	MB	Beryllium	µg/sample	ND	NA	NA	NA	NA
BL-240257-1	MB	Cadmium	µg/sample	ND	NA	NA	NA	NA
BL-240257-1	MB	Lead	µg/sample	ND	NA	NA	NA	NA
QC-240257-1	LCS	Beryllium	µg/sample	11.4	NA	10.0	114.	NA
QC-240257-1	LCS	Cadmium	µg/sample	33.9	NA	30.0	113.	NA
QC-240257-1	LCS	Lead	µg/sample	106.	NA	100.	106.	NA
QD-240257-1	LCSD	Beryllium	µg/sample	11.4	11.4	10.0	114.	0.0868
QD-240257-1	LCSD	Cadmium	µg/sample	33.5	33.9	30.0	112.	1.14
QD-240257-1	LCSD	Lead	µg/sample	105.	106.	100.	105.	0.956

MB - Method Blank

LCS - Laboratory Control Sample

LCSD - Laboratory Control Sample Duplicate

MS - Matrix Spike

MSD - Matrix Spike Duplicate

LD - Laboratory Duplicate

NA - Not Applicable

ND - Parameter not detected above LOD

$LCS, LCSD \text{ Percent Rec.} = (\text{Result} / \text{Target}) * 100.0$

$MS, MSD \text{ Percent Rec.} = ((\text{Result} - \text{Parent}) / \text{Target}) * 100.0$

$LCS, LCSD \text{ Relative Percent Diff.} = ((|LCS - LCSD|) / ((LCS + LCSD)/2.0)) * 100.$

$MS, MSD \text{ Relative Percent Diff.} = ((|MS - MSD|) / ((MS + MSD)/2.0)) * 100.$

$LD \text{ Relative Percent Diff.} = ((|Parent - LD|) / ((Parent + LD)/2.0)) * 100$

0214-01

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST														
Collector: <u>Yetta Jones</u>		Company Contact: <u>Denise A. Pitts and Henry W. Ruby</u>		Telephone No. <u>531-1229</u>		Project Coordinator: <u>Joan H. Kessner</u>		Data Turnaround						
Payroll #: <u>73513</u>		Sampling Location: <u>300 Area</u>		SPECIAL INSTRUCTIONS All relevant COAs must be provided: <u>R303MO J451</u>		SAF No. <u>RC-001</u>		24 HOUR						
Type of Sample: <u>Wipes & Air</u>		300M Building		ANALYSIS METHOD (SPECIFIC): <u>NIOSH 7300</u>		Method of Shipment: <u>FED EX</u>								
Shipped To: <u>Data Chem</u>		Wipe Sample Media: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				Bill of Lading/Air Bill No. <u>8541 9337 5340</u>								
Salt Lake City		Other: <input type="checkbox"/>												
POSSIBLE SAMPLE HAZARD/REMARKS <u>Be, Pb, Cd</u>		MATRIX A - AIR W1 - WIPE X - OTHER		Preservation (i.e., cooling required, etc.)										
Special Handling and/or Storage <u>na</u>														
SAMPLE ANALYSIS														
SAMPLE NO.	MATRIX	SAMPLE DATE	VOLUME (L) or Area (cm ²)	Comments	Asbestos Airborne	Lead Airborne	Beryllium Airborne	Beryllium Wipe	Mold	Lead Wipe	Cd Wipe	Cd Airborne	Na	
J10x04	W1	1-18-06	na	Blank	NOT DET			X		X			na	
J10x06	W1	1-18-06	na	Blank	NOT DET			X		X			na	
J10x07	W1	1-18-06	100cm ²	na	NOT DET			X		X			na	
J10x08	A	1-18-06	na	Blank	NOT DET			X		X			na	
J10x09	A	1-18-06	na	Blank	NOT DET			X		X			na	
J10x46	A	1-18-06	884 L	personal	NOT DET			X		X			na	
J10x03	A	1-18-06	91 L	personal	NOT DET			X		X			na	
J10x99	A	1-18-06	83 L	personal	NOT DET			X		X			na	
				<u>1-18-06</u>										

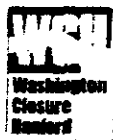
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WCH-SH-202 (06/29/2005)

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CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

Collector: <u>Deton Jones</u>		Company Contact Denise A. Pitts and Henry W. Ruby		Telephone No. 531-1229		Project Coordinator Joan H. Kessner		Data Turnaround						
Payroll #: <u>73513</u>		Sampling Location <u>300 Area</u>		SPECIAL INSTRUCTIONS All relevant COAs must be provided: <u>R303MO J451</u> ANALYSIS METHOD (SPECIFIC): <u>NIOSH 7300</u>		SAF No. RC-001		<u>24 HOUR</u>						
Type of Sample: <u>Wipes & Air</u>		303M Building				Method of Shipment <u>FED EX</u>								
Shipped To: <u>Data Chem</u> <u>Salt Lake City</u>		Wipe Sample Media: Ghost <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Other _____				Bill of Lading/Air Bill No. <u>8541 9337 5340</u>								
POSSIBLE SAMPLE HAZARD/REMARKS <u>Be, Pb, Cd</u>		MATRIX A - AIR WI - WIPE X - OTHER		Preservation (i.e., cooling required, etc.)		No	No	No	No	No	No	No	No	na
Special Handling and/or Storage <u>na</u>						No	No	No	No	No	No	No	No	na

SAMPLE ANALYSIS					Asbestos Airborne	Lead Airborne	Beryllium Airborne	Beryllium Wipe	Mold	Lead Wipe	Cd Wipe	Cd Airborne	
SAMPLE NO.	MATRIX	SAMPLE DATE	VOLUME (L) or Area ____ cm ²	Comments									
J10X04	WI	1-18-06	na	Blank				X	na	X	X		
J10R46	WI	1-18-06	na	Blank	18-06	18-06		X	na	X	X		18-06
J10X06	WI	1-18-06	100cm ²	na				X	na	X	X		
J10X07	WI	1-18-06	100cm ²	na				X	na	X	X		
J10XB8	A	1-18-06	na	Blank	na	X	X						
J10XB9	A	1-18-06	na	Blank	na	X	X					X	na
J10X46	A	1-18-06	884 L	personal	na	X	X					X	na
J10WW3	A	1-18-06	92 L	personal	na	X	X					X	na
J10X99	A	1-18-06	83 L	personal	na	X	X					X	na
				18-06									

510 x 04

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